AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A semiconductor apparatus, comprising:

a semiconductor substrate;

a field oxide film formed [[on]] over a surface of the semiconductor substrate, the field oxide film having an aperture section;

a pad electrode, having an aperture section, formed [[on]] over the field oxide film; and

a penetration electrode electrically connected to the pad electrode via the aperture section of the field oxide film, ~~and~~ via a hole formed in the semiconductor substrate, and via the aperture section of the pad electrode,

the hole in the semiconductor substrate being formed entirely within the aperture section of the field oxide film, when perpendicularly viewing the semiconductor substrate, so that an opening of the hole is smaller than the aperture section.

2. (Previously presented) The semiconductor apparatus as set forth in claim 1, wherein: the penetration electrode is formed in a field area of the surface of the semiconductor substrate.

3. (Canceled)

4. (Currently amended) The semiconductor apparatus as set forth in claim [[3]] 1, wherein: the aperture section of the field oxide film is formed in the aperture section of the pad electrode, when perpendicularly viewing the semiconductor substrate.

5. (Previously presented) The semiconductor apparatus as set forth in claim 1, wherein: an insulating film is formed on an internal surface of the hole between the internal surface of the hole and a sidewall of the penetration electrode.

6. (Original) The semiconductor apparatus as set forth in claim 5, wherein: the penetration electrode includes an electrically conductive film on the insulating film that is formed on the internal surface of the hole.

7. (Original) The semiconductor apparatus as set forth in claim 1, wherein: the penetration electrode includes a hole-filling section formed in the hole.

8. (Previously presented) The semiconductor apparatus as set forth in claim 1, wherein: a hole-filling section is formed in the hole, and the hole-filling section is made of an insulating material.

9. (Original) The semiconductor apparatus as set forth in claim 7, wherein: the hole-filling section is made of an electrically conductive material.

10. (Withdrawn) A method for manufacturing a semiconductor apparatus including (i) a field oxide film formed in a surface of a semiconductor substrate, (ii) an electrode formed on the field oxide film, and (iii) a penetration electrode that penetrates the field oxide film and the semiconductor substrate, respectively, and that is electrically connected to the electrode,

said method, comprising the steps of:

(a) forming an aperture section in the field oxide film so that the semiconductor substrate is exposed in the aperture section;

(b) forming a hole in an area of the semiconductor substrate, the area being exposed in the aperture section of the filed oxide film;

(c) forming an insulating film on an internal surface of the hole, and

(d) forming an electrically conductive film on the insulating film formed,

the steps (c) and (d) forming the penetration electrode.

11. (Withdrawn) The method for manufacturing a semiconductor as set forth in Claim 10, wherein:

the step (c) includes the step of:

(e) printing an insulating material under a certain air pressure so that the hole is covered, and then increasing the air pressure more than the certain air pressure so that a film made of the insulating material is formed on the internal surface of the hole.

12. (Withdrawn) The method as set forth in Claim 11, wherein:

the step (e) is repeated more than once.

13. (Withdrawn) The method as set forth in Claim 11, wherein:

the step (d) includes the step of:

(f) printing an electrically conductive material under a certain air pressure so that the hole is covered, and then increasing the air pressure more than the certain air pressure so that a layer made of the electrically conductive layer is formed on the internal surface of the hole.

14. (Withdrawn) The production method of a semiconductor as set forth in Claim 13, wherein:

the step (f) is repeated more than once.

15. (Withdrawn) The production method of a semiconductor as set forth in Claim 10, further comprising the step of:

(g) forming a hole-filling section in the hole,

the step (g) including the step of:

(h) printing an insulating material or an electrically conductive material under a certain air pressure so that the hole is covered, and then increasing the air pressure more than the certain air pressure so that the hole is filled with the insulating material or the electrically conductive material.

16. (Withdrawn) The method as set forth in Claim 15, wherein:

the step (h) is repeated more than once so as to fill the hole with the insulating material or the electrically conductive material.

17. (Previously presented) The semiconductor apparatus of claim 1, wherein the pad electrode is formed so that there is no overlap with the hole when perpendicularly viewing the semiconductor substrate.

18. (Currently amended) A penetration electrode for use in a semiconductor apparatus, the semiconductor apparatus comprising a semiconductor substrate, a field oxide film formed [[on]] over a surface of the semiconductor substrate, the field oxide film having an aperture section that is an opening through the field oxide film, and a pad electrode formed [[on]] over the field oxide film; wherein:

the pad electrode has an aperture section,

the penetration electrode is electrically connected to the pad electrode via the aperture section of the field oxide film, ~~and~~ via a hole formed in the semiconductor substrate, and via the aperture section of the pad electrode,

the hole being formed entirely within the aperture section of the field oxide film, when perpendicularly viewing the semiconductor substrate, so that an opening of the hole is smaller than the aperture section; and

the penetration electrode being formed in a field area of the surface of the semiconductor substrate.

19. (Currently amended) A penetration electrode for use in a semiconductor apparatus, the semiconductor apparatus comprising:

a semiconductor substrate,

a field oxide film formed [[on]] over a surface of the semiconductor substrate, the field oxide film having an aperture section that is an opening through the field oxide film,

a pad electrode, having an aperture section, formed [[on]] over the field oxide film;

wherein:

the penetration electrode is electrically connected to the pad electrode via the aperture section of the field oxide film, ~~and~~ via a hole formed in the semiconductor substrate, and via the aperture section of the pad electrode, and

the hole being formed entirely within the aperture section of the field oxide film, when perpendicularly viewing the semiconductor substrate, so that an opening of the hole is smaller than the aperture section~~; and~~

~~the pad electrode having an aperture section~~.

20. (Currently amended) The penetration electrode of claim 19, wherein the aperture section of the field oxide film is formed in the aperture section of the pad electrode, when perpendicularly viewing the semiconductor substrate.

21. (New) The semiconductor apparatus of claim 4, wherein the aperture section in the pad electrode is larger than the aperture section in the field oxide film, when perpendicularly viewing the semiconductor substrate.